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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,061	10/31/2001	Frederick W. Giacobbe	25184-P033US / S5648	6704

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EXAMINER

OGDEN JR, NECHOLUS

ART UNIT PAPER NUMBER

1751

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/004,061	GIACOBBE, FREDERICK W.	
	Examiner	Art Unit	
	Necholus Ogden	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) 62-66 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-61 and 67-76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of 1-61 and 67-76 in the reply filed on 7-1-04 is acknowledged. The traversal is on the ground(s) that the restriction is improper. This is not found persuasive because the claims are distinct as evident by their divergent classification.

The requirement is still deemed proper and is therefore made FINAL.

This application contains claims 62-66 drawn to an invention nonelected with traverse in the reply filed on 7-1-04. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See

MPEP § 821.01.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 67-76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant states the method of making the heat transfer fluid....comprising the steps of: However, the steps are not stated in claim 67, but subsequent claims 68-71 only state the steps of claim 67. Accordingly, the claims are considered vague and indefinite for reasons stated above.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-11, 13, 15-61 and 67-76 are rejected under 35 U.S.C. 102(b) as being anticipated by Shulte (5452583).

6. Shulte disclose a heat transfer fluid mixture comprising hydrogen, helium and carbon dioxide (col. 4, lines 55-58), and Shulte teaches that argon maybe used to fill the heat exchanger (col. 7, lines 25-30). Moreover, Shulte teaches that the hydrogen has a concentration range from 0.1 mole percent to about 1.0 mole percent (col. 4, line 47) and the helium has a concentration of at least 80% by volume (col. 4, lines 55-58). Shulte further teaches that the item with the gas mixture directly, indirectly or combination thereof (18a, 19a, 101, 103b, optical fiber, fig. 2), method of cooling (optical fiber, 101, fig. 3), a method of cooling a cylindrical optical fiber (optical fiber, 101, fig. 3), a method of cooling or heating an item, traversing through a substantially confined space the method comprising contacting the item with gas mixtures (18a, 19a, 101, 103b, optical fiber, fig. 2).

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As this reference teaches all of the instantly required it is considered anticipatory.

7. Claims 1-11, 13, 15-61 and 67-76 are rejected under 35 U.S.C. 102(b) as being anticipated by Ji et al (6,125,638). Ji et al teach a heat transfer fluid mixture wherein said mixture comprises hydrogen, helium, argon and carbon dioxide (col. 2, lines 53-57 and col. 6, lines 36-52). The hydrogen has a concentration from about 1mole percent to 40 mole percent (col. 6, line 45), wherein said reference teaches contacting the item with the gas mixture directly, indirectly or combination thereof (col. 14, line 10, fig. 1), a method of cooling or heating an item traversing through confined space (14, 10, fig.1) and a method cooling a cylindrical optical fiber through a heat exchanger (14, 10, fig. 1), and a method of cooling or heating an item with the gas mixture (10, 14, fig. 1).

9. As this reference teaches all of the instantly required it is considered anticipatory.

10. Claims 1, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Short et al (5,595,678).

Short et al teach a lubricant composition for ammonia refrigerant comprising chlorofluorocarbons and a lubricant (see abstract, col. 11, lines 56-67 and examples).

As this reference teaches all of the instantly required it is considered anticipatory.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

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patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-76 are rejected under the judicially created doctrine of double patenting over claims 1-33 of U. S. Patent No. 6,574,972 and claims 1-24 of U.S. Patent 6,651,358 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: heat transfer gas mixtures of hydrogen and helium.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application, which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Necholas Ogden whose telephone number is 571-272-1322. The examiner can normally be reached on M-T and Th-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra N. Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Necholus Ogden
Primary Examiner
Art Unit 1751

No
9-17-04